

Notice of Allowability

Application No.

09/655,846

Examiner

Huy D Nguyen

Applicant(s)

TABATA ET AL.

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2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/06/2004.
2. ☒ The allowed claim(s) is/are 1-3 and 5-20.
3. ☒ The drawings filed on 06 September 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carl T. Thomsen on 11/23/2004.

The application has been amended as follows:

Claim 21 has been canceled.

2. Claims 1 and 16 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 16, Spector discloses an interactive safety helmet for a bicyclist comprising: transceiver 16 to which microphone 19 and loudspeakers 13 and 14 are connected (FIG. 3 & 5; Col. 4, lines 62-65). Spector does not teach a repeating apparatus mounted on vehicle for communicating with the transceiver. However, the preceding limitation is well known in the art. O'Neill, Jr. discloses an inside electronic package 110 coupling the inside portion 106a to a radiotelephone 114, and is located adjacent the inside portion 106a and remote from the radiotelephone 114. The electronic package includes a receive amplifier that amplifies RF signals that are received from the outside antenna 102 via the through-the-window coaxial coupler 106 and that provides the amplified RF signal to the radiotelephone 114. The electronic

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package also include a transmit amplifier that amplifies RF signals from the radiotelephone 114 before being passed through the coaxial coupler. The transmit amplifier raise the transmitted power from the outside antenna 102 to desired levels (FIG. 1; Col. 4, lines 40-51). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include in Spector's vehicle a repeater as disclosed in O'Neill, Jr. in order to amplifies the transmit/receive signals to the desired levels to maintain the signal quality and to conserve battery of transceiver 16. O'Neill, Jr. does not teach that the repeater includes a mute function and attenuates or interrupts when a sound source having higher priority order and another sound source having lower priority order interfere with each other. However, the preceding limitation is well known in the art. Heddle et al. discloses a method and system for mixing audio stream wherein audio streams from other applications or program modules that do not have the sound focus and do not have are not audible. If the sound focus changes, the audio mixer mutes the audio streams from the application which had the sound focus and begins sending the audio streams from the new application that has gained the sound focus to the sound card [Col. 2, lines 32-47]. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the teaching of Heddle et al. within the system of O'Neill, Jr. in order to eliminate unwanted sound. However, the closest prior arts, Spector, O'Neill, Jr., and Heddle et al. fail to teach that the battery is housed within a case of the transmitter-receiver; wherein said transmitter-receiver is removably mounted at the center of a rear portion of each helmet through a removable fixing member and includes a pair of operation buttons disposed one above another on a rear face of the case, the operations buttons being disposed on either a right

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side or a left side of the case, and the battery being disposed in the right or the left side of the case opposite to the side where the operations buttons are disposed.

Claims 2-3, 5-15, 19 depend on claim 1. Therefore, they are allowable.

Claims 17-18, 20 depend on claim 16. Therefore, they are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

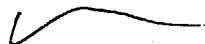
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huy Nguyen



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600